

Notice of Allowability

Application No.

10/722,551

Examiner-

Maureen M. Wallenhorst

Applicant(s)

KAWABATA ET AL.

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1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on February 13, 2007.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Todd Baker on April 25, 2007.

On line 4 of claim 1, the phrase —and to form a filtrate—was inserted after the word “size”. On line 7 of claim 1, the phrase “a filtrate” was changed to —said filtrate--.

On line 3 of claim 5, the phrase —and to form a filtrate—was inserted after the word “size”. On line 6 of claim 5, the phrase “a filtrate” was changed to —said filtrate--.

On line 3 of claim 9, the phrase —and to form a filtrate—was inserted after the word “size”. On line 6 of claim 9, the phrase “a filtrate” was changed to —said filtrate--. On line 9 of claim 9, the phrase “is diagnosed” was changed to —is also diagnosed--. On lines 13-14 of claim 9, the phrase “the timing before the wear depth reaches the predetermined surface roughness of the lubricated portion is forecast on the basis of the rate of change” was changed to —the timing before the wear depth of the lubricated portion reaches a predetermined surface roughness is forecast on the basis of the rate of change--.

On line 3 of claim 10, the phrase —and to form a filtrate—was inserted after the word “size”. On line 5 of claim 10, the phrase “a filtrate” was changed to —said filtrate--. On lines 6 and 9 of claim 10, the phrase “means for determining” was changed to —means for calculating--.

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On line 13 of claim 10, the word –and—was inserted after the semicolon. On line 15 of claim 10, the phrase “said diagnosing means diagnosis” was changed to –said diagnosing means also diagnoses--. On lines 17-18 of claim 10, the phrase “the timing before the wear depth reaches the predetermined surface roughness of the lubricated portion is forecast on the basis of the rate of the change” was changed to –the timing before the wear depth of the lubricated portion reaches a predetermined surface roughness is forecast on the basis of the rate of change--.

2. The following is an examiner’s statement of reasons for allowance: Application serial no. 10/722,551 is being allowed since none of the prior art of record teaches or fairly suggests a method and apparatus for diagnosing a lubricated portion by filtering a lubricating oil picked up from the lubricated portion so as to separate out metal particles of a predetermined size and to form a filtrate, analyzing the metal concentration by emission spectrometry in both the filtrate portion and in the separated metal particles of predetermined size by dissolving the metal particles in an acid to form a solution, and diagnosing a state of the lubricated portion on the basis of the metal concentrations in both the filtrate and the solution containing the dissolved metal particles of a predetermined size. None of the prior art of record teaches or fairly suggests analyzing in a single lubricating oil sample both the metal particles separated from the lubricating oil and the filtrate resulting from the separation in order to diagnose the state (i.e. wear) of a lubricated portion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen M. Wallenhorst whose telephone number is 571-272-1266. The examiner can normally be reached on Monday-Thursday from 6:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maureen M. Wallenhorst
Primary Examiner
Art Unit 1743

mmw

April 26, 2007

Maureen M. Wallenhorst
MAUREEN M. WALLENHORST
PRIMARY EXAMINER
GROUP 1700